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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/823,361

04/13/2004

Raymond J. Kolar

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07/26/2007

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EXAMINER

TRINH, TAN H

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

07/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/823,361

Applicant(s)

KOLAR, RAYMOND J.

Examiner

TAN TRINH

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9 and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joshi (U.S. Patent No. 6278876) in view of Park (U.S. Pub. No. 2004/0233847).

Regarding claims 1 and 18, Joshi teaches a method for improving the effective availability of a connection between terminals over a satellite link (see fig. 1, col. 2, lines 16-41), comprising the steps of: a. periodically sending a heartbeat message across the connection (see col. 4, lines 7-38). In this case, the keep-alive burst (KAB) include background sounds present, commands and status message associated with power control, information implicit in the waveforms transmitted include the power level of the signal, and information used in tracking both carrier frequency offset and symbol timing error for synchronization between the transmitter and receiver, that can be a heartbeat message. But Joshi does not mention treating failure to receive a heartbeat message within a predefined interval as disconnect; and establishing a new connection between the terminals across the satellite link in response to the disconnect.

However, Park teaches treating failure to receive a heartbeat message within a predefined interval as disconnect; and c. establishing a new connection between the terminals across the satellite link in response to the disconnected (see fig. 5, keep-alive message with time interval S504 and re-establish route S506, pages 3, sections [0033-0038]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify above teaching of Joshi with Park, in order to provide re-establish route when recognized the link is failure (see suggested by Park on page 3, section [0035]).

Regarding claim 2, Joshi teaches the heartbeat messages are sent by at least one terminal (see fig. 1, terminal 16, col. 4, lines 7-38).

Regarding claim 3, Joshi teaches the heartbeat messages are sent by both terminals participating in a connection (see fig. 1, terminals 12 and 16, col. 4, lines 7-47).

Regarding claims 4 and 19, Park teaches the step of treating failure to received a heartbeat message within a predefined interval as a disconnect comprises the step of turning off power to a satellite terminal and reapplying power to the terminal after a predefined interval (see fig. 5, keep-alive message with time interval S504 and re-establish route S506, pages 3, sections [0033-0038]). In this case, the reset source node reset the counting, that can be reset by turn off/on the power supply of the terminal to reset the counting and reset route.

Regarding claim 5, Park teaches the step of treating failure to received a heartbeat message within a predefined interval as a disconnect further comprises the step of dialing a satellite gateway station (see fig. 1, col. 5, lines 46-57). In this case, the terminal 12 or gateway 16 the channel is tuning with the satellite station, that is obvious to dialing the satellite gateway station.

Regarding claims 6 and 20, Park teaches the step of treating failure to received a heartbeat message within a predefined interval as a disconnect further comprises the step of dialing the number of one of the terminals participating in the connection (see fig. 1, col. 5, lines 46-57 and see enter the phone number of the terminals participating in col. 6, lines 4-26).

Regarding claim 7, Joshi teaches a communications unit (16) for sending information to a remote unit (12) over a satellite (14) (see fig. 1), comprising: a processor (16) for sending information to a remote unit (12) over a satellite (14) (see fig. 1, col. 4, lines 7-21). In this case, the gate way system 16 controller and forward (send) control signal to remote terminal 12, the control function of the gateway 16 that is processing the signal and send it to terminal 12. The information comprising a keep alive burst (KAB) include a description of back ground sound present and command message and status message, and information used in tracking both carrier frequency and symbol timing error for synchronization between the transmitter and receiver (see col. 4, lines 7-47). In this case, the keep alive burst (KAB) is obvious to the heartbeat message. But Joshi does not mention the predetermined intervals.

However, Park teaches a heartbeat message within a predefined interval; (see fig. 5, keep-alive message with time interval S504 and re-establish route S506, pages 3, sections [0033-0038]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify above teaching of Joshi with Park, in order to provide re-establish route when recognized the link is failure (see suggested by Park on page 3, section [0035]).

Regarding claim 8, Joshi teaches the information further comprises information for remotely controlling the remote unit (12) (see fig. 1, the command message on col. 4, lines 40-42). In this case, the remote power control on mobile 12 can be the information remotely controlling the remote unit.

Regarding claim 9, Park teaches the processor detects failure to receive a heartbeat message from the remote unit within a predetermined time interval and reestablishes a connection (see page 3, sections [0035-0038]), and Joshi teaches the reestablishes remote unit (12) over the satellite (14) in response to the failure (see fig. 1 and 12-13, col. 14, lines 35-67, and col. 15, lines 1-4). Therefore, the combination of Joshi and Park is teaching the limitation of the claim.

Regarding claim 14, Joshi teaches the processor receives remote control information from the remote unit, and uses the remote control information to control devices located at the unit) (see fig. 1, the command message on col. 4, lines 40-42). In this case, the remote power control on mobile 12 can be the information remotely controlling the remote unit.

Regarding claim 15, Joshi teaches which the processor sends information to a remote unit (12) by way of a satellite ground station (16) and a satellite station (14) see fig. 1, col. 4, lines 7-38).

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Regarding claim 16, Joshi inherently teaches which the processor is part of a computer system (see fig. 1, the gateway 16 of the base station processing the signal for communication is a part of computer system.

Regarding claim 17, Joshi teaches the processor is firmware controlled (see col. 4, lines 7-32). In this case, the control function for the communication system is the firmware control.

3. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joshi (U.S. Patent No. 6278876) in view of Park (U.S. Pub. No. 2004/0233847) further in view of Seah (U.S. Pub. No. 2003/0071743).

Regarding claim 10, Joshi teaches the processor receives from the satellite information from the remote unit (see fig. 1, col. 4, lines 61-65). But Joshi or Park fails to teach the satellite information comprising one of camera output and telemetry information.

However, Seah teaches the satellite (18) information (10 and 16) comprising one of camera output and telemetry information (see fig. 1, 11-12, page 1, section [0007] and page 3, section [0057]). In this case the, the on-board system 21 with camera and audio system, compressed audio/video can be transmitted to demand to the ground station via satellite communication subsystem.

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify combination of the above teaching of Joshi and Park with Seah, in order to provide ground center or base station with the ability to control portions of the on-board

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computer and process and archive information from all of the on-board (remote terminal) subsystems (see suggested by page 4, sections [0071-0072]).

Regarding claim 11, Seah teaches the processor controls display of the camera information to a user (see fig. 1, 11-12, page 1, section [0007] and page 3, section [0057] and page 4, sections [0071-0072]). In this case, the ground station monitor and zoom into the particular part of each video image that is the processor controls display of the camera information to a user.

Regarding claim 12, Seah teaches the information further comprises information from sensors at the remote unit's location (see fig. 11, item 24's, door sensors, tamper sensors, page 3, section [0057]).

Regarding claim 13, Seah teaches the processor receives camera information and from the remote unit over the satellite (see fig. 1, 11-12, page 1, section [0007] and page 3, section [0057]). In this case the, the on-board system 21 with camera and audio system, compressed audio/video can be transmitted to demand to the ground station via satellite communication subsystem.

Conclusion

4. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(571) 273-8300, (for Technology Center 2600 only)

*Hand-delivered responses should be brought to the Customer Service Window (now located at the **Randolph Building, 401 Dulany Street, Alexandria, VA 22314**).*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Trinh whose telephone number is (571) 272-7888. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, Anderson, Matthew D., can be reached at (571) 272-4177.

The fax phone number for the organization where this application or proceeding is assigned is **(571) 273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is **(703) 306-0377**.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tan H. Trinh
Division 2618
July 19, 2007

PATENT EXAMINER
TRINH, TAN

